

Ed  
22

evaluating the customer and each of the accounts for the second product or service via an iterative function having virtual attributes and which iterates through in accordance with the number of accounts for the second product or service of the customer.

36. (ONCE AMENDED) A process as in claim 29, wherein said evaluating the customer and each of the accounts for the first product or service comprises:

evaluating the customer and each of the accounts for the first product or service via first and second iterative functions, each having virtual attributes and iterating through in accordance with the number of accounts for the first product or service of the customer, wherein the first iterative function calls the second iterative function.

37. (ONCE AMENDED) A process as in claim 36, wherein said evaluating the customer and each of the accounts for the second product or service comprises:

evaluating the customer and each of the accounts for the second product or service via first and second iterative functions, each having virtual attributes and iterating through in accordance with the number of accounts for the second product or service of the customer, wherein the first iterative function calls the second iterative function.

#### REMARKS

#### I. STATUS OF THE CLAIMS

Independent claims 1, 26, 28 and 29 are amended herein.

Claims 1-11 and 22-37 are currently pending.

#### II. REJECTION OF CLAIMS UNDER 35 USC 102(E) AS BEING ANTICIPATED BY WALKER, USP 6,088,686

The present invention as recited, for example, in claim 1, relates to a computer-implemented decision management process for evaluating a customer of an organization having more than one account. The process comprises (a) loading all customer and account data required for evaluating the customer and each of the accounts; and (b) evaluating the customer and each of the accounts via an iterative function which uses the loaded customer and account data.

As recited, for example, in claim 1, the evaluation evaluates **each account for a same product or service** via the iterative function **with the same strategy** and evaluates accounts

for **different products or services** via the iterative function **with different strategies**.

Moreover, as recited, for example, in claim 1, the loaded customer and account data is sufficient to evaluate the customer and each of the accounts without loading additional customer or account data.

Claims 26, 28 and 29 include somewhat similar language to that described above for claim 1.

**Please note that claim 1 is amended herein to recite the customer and account data being loaded at a time prior to said evaluating. Similar amendments are made to claims 26, 28 and 29. It is respectfully submitted that the amendments address the Examiner's concerns in item 4 on page 5 of the outstanding Office Action that the claims be amended to give order to when the loading is being done or how it is accumulated.**

As an example, in the specific example in FIG. 10 of the application, an **iterative function** (see "next iteration" in FIG. 10) is used to evaluate the customer and each of the accounts. In steps 222 and 224, the type of account is taken into consideration. For example, it is determined what kind of product or service the account is for. In FIG. 10, **different strategies are used to evaluate credit card accounts and mortgage accounts, respectively**. Via the iterative function in FIG. 10, the process loops back so that each account of the customer is evaluated, with accounts for different products or services being evaluated with different strategies.

Therefore, in the example of FIG. 10, via the use of an iterative function, the required customer and account data is loaded, prior to doing the evaluation for the various accounts. The loaded customer and account data is sufficient to evaluate the customer and each of the accounts, without loading additional customer or account data.

Please note that claim 1 specifically recites that all customer and account data required for evaluating the customer and each of the accounts is loaded at a time prior to said evaluating.

Moreover, please note that claim 1 recites that the customer and each of the accounts is evaluated via an *iterative function* which uses the loaded customer and account data, and that the loaded customer and account data is sufficient to evaluate the customer and each of the accounts without loading additional customer or account data. See for example, page 17, line 19, through page 18, line 6, of the specification. See also FIGS. 9, 10 and 11.

Claims 26, 28 and 29 include somewhat similar recitations as those described above for claim 1.

Walker relates to processing of applications for products and services offered by a financial institution. See, for example, the Abstract, and column 5, lines 66, through column 6, line 15, of Walker. The overall processing of applications is shown in the flow chart which runs from FIGS. 40-51 of Walker.

However, Walker shows the processing of only a SINGLE application by an applicant. The process does NOT show the processing of multiple applications by the same applicant.

For example, FIGS. 40-51 of Walker show the various processes which are executed to determine if a respective application is accepted. Final processing is shown in FIG. 51. Referring to FIG. 51, after a decision on a processed application is made, customer information is updated in step 2258. Then, the processing ends in step 2260.

It is important to note that the final processing in FIG. 51 of Walker does NOT loop back to FIG. 40 to begin processing of another application of the same applicant. This is significantly different than the present invention, where a plurality of accounts of an applicant are evaluated via an iterative function.

**Therefore, Walker does not show the use of an iterative function to evaluate more than one account, as in various embodiments of the present invention.**

Moreover, if some type of loop back was considered in Walker, it is unclear where such a loop back would return. For example, steps 2002 to 2006 in FIG. 40 of Walker relate to the loading of customer data. If the system of Walker would require a loop back to steps 2000 or 2002, such a loop back would be significantly different than various claimed embodiments of the present invention where all the required customer and account data for evaluating a plurality of accounts is loaded, since customer data in Walker would have to be reloaded in the system to evaluate another application. This operation in Walker would be contrary to the present invention as recited, for example, in claim 1. Please note that Walker also retrieves data in other steps, such as in steps 2092 and 2094 in FIG. 43.

Therefore, it is respectfully submitted that Walker does not disclose or suggest the use of an **iterative function** to evaluate a plurality of accounts of a customer, or the **loading of all required customer and account data** to evaluate a plurality of accounts of the customer, as in various claimed embodiments of the present invention.

Please note that independent claims 23 recites an iterative function, but does not recite the loading of customer and account data.

\* \* \*

In item 4 on page 5 of the outstanding Office Action, the Examiner asserts that Walker shows a debt payment. According to the Examiner, the debt payment might include three credit card payments handled with the same strategy, and a mortgage payment handled with a different strategy.

From a review of Walker, it appears that the Examiner is referring to the Maximum Debt Burden Offer disclosed, for example, in column 7, line 57, through column 8, line 24, of Walker. As specifically disclosed in column 8, lines 17-24, of Walker, the Maximum Debt Burden Offer refers to:

a maximum loan or line dollar amount whose associated monthly payment, when added to the monthly payment amounts for the applicant's existing debts and rent or mortgage payment, divided by the customers' monthly income, creates a debt burden ratio (such as 45%) that is specified in the product parameters. If the maximum debt burden amount is negative or not used because amount requested is less than designated parameter (e.g., \$2,500), the amount assigned to Maximum Debt Burden Offer will default to product minimum.

Therefore, generally, Walker simply uses the total debt payments to determine an amount that can be loaned to an applicant. Such debt payments might include, for example, credit card debt and mortgage debt.

However, this disclosure in Walker does not indicate the use of an iterative function to evaluate each account of a customer for a same product or service via the same strategy and evaluate accounts of the customer for different products or services with different strategies as recited, for example, in claim 1. For example, as indicated above, Walker shows the processing of only a SINGLE application by an applicant. The process does NOT show the processing of multiple applications by the same applicant.

\* \* \*

In item 4 on page 5 of the outstanding Office Action, the Examiner asserts that Walker shows a series of look-up tables which are iteratively used in the process of Walker. Therefore, the Examiner correlates the look-up tables of Walker to the iterative function of the claimed invention.

The look-up tables of Walker are disclosed, for example, in column 9, line 66, through column 10, line 13, of Walker. From this disclosure in Walker, it appears that the look-up tables are used simply as a relational tool to access stored data, such as in a relational database model. Such use of look-up tables is significantly different than the use of an iterative function of the claimed invention. More specifically, it is respectfully submitted that the look-up tables of Walker do not indicate the use of an iterative function to evaluate each account of a customer for a same product or service via the same strategy and evaluate accounts of the customer for different products or services with different strategies as recited, for example, in claim 1. Instead, the look-up tables of Walker simply indicate that data can be stored and accessed in a relational manner.

\* \* \*

In view of the above, it is respectfully submitted that the rejection is overcome.

### III. CONCLUSION

In view of the above, it is respectfully submitted that the application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

If any further fees are required in connection with the filing of this response, please charge such fees to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date:

January 23, 2003

By:

Paul I. Kravetz  
Paul I. Kravetz  
Registration No. 35,230

700 Eleventh Street, NW, Suite 500  
Washington, D.C. 20001  
(202) 434-1500

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS:**

Please AMEND the claim as indicated below:

For the convenience of the Examiner, all the pending claims are reproduced below, in their current form, whether or not the claims are amended herein.

1. (FOUR TIMES AMENDED) A computer-implemented decision management process for evaluating a customer of an organization having more than one account, comprising:

loading all customer and account data required for evaluating the customer and each of the accounts;

evaluating the customer and each of the accounts via an iterative function which uses the loaded customer and account data, wherein said evaluating evaluates each account for a same product or service via the iterative function with the same strategy and evaluates accounts for different products or services via the iterative function with different strategies, the loaded customer and account data being loaded at a time prior to said evaluating and being sufficient to evaluate the customer and each of the accounts by said evaluating without loading additional customer or account data; and

taking an action in accordance with a result of said evaluating.

2. (ONCE AMENDED) A process as in claim 1, further comprising:  
providing the customer data and the account data to the process for evaluation on separate extracts.

3. (ONCE AMENDED) A process as in claim 1, further comprising:  
providing the customer data and the account data to the process for evaluation on a plurality of extracts.

4. (NOT AMENDED) A process as in claim 3, wherein different extracts are associable with different data sources.

5. (ONCE AMENDED) A process as in claim 1, wherein at least one of the

group consisting of the customer data and the account data are accessed for evaluation via the iterative function via virtual attributes.

6. (TWICE AMENDED) A process as in claim 1, wherein said evaluating comprises:

evaluating the customer and each of the accounts for the same product or service via an iterative decision tree having virtual attributes and which iterates through in accordance with the number of said accounts for the same product or service of the customer.

7. (TWICE AMENDED) A process as in claim 1, wherein said evaluating comprises:

evaluating the customer and each of the accounts for the same product or service via an iterative matrix having virtual attributes and which iterates through in accordance with the number of said accounts for the same product or service of the customer.

8. (TWICE AMENDED) A process as in claim 1, wherein said evaluating comprises:

evaluating the customer and each of the accounts for the same product or service via an iterative function having virtual attributes and which iterates through in accordance with the number of said accounts for the same product or service of the customer.

9. (TWICE AMENDED) A process as in claim 1, wherein said evaluating comprises:

evaluating the customer and each of the accounts for the same product or service via an iterative function having both virtual attributes and non-virtual attributes and which iterates through in accordance with the number of said accounts for the same product or service of the customer.

10. (TWICE AMENDED) A process as in claim 1, wherein said evaluating comprising:

evaluating the customer and each of the accounts for the same product or service via first and second iterative functions, each having virtual attributes and iterating through in accordance with the number of said accounts for the same product or service of the

customer, wherein the first iterative function calls the second iterative function.

11. (NOT AMENDED) A process as in claim 10, wherein the first iterative function is an iterative decision tree and the second iterative function is an iterative matrix.

22. (NOT AMENDED) A process as in claim 8, further comprising:  
storing results of iterations through the iterative function in a derived virtual attribute.

23. (THREE TIMES AMENDED) A computer-implemented decision management process for evaluating a customer of an organization having more than one account, said more than one account including accounts for different products or services, the process comprising:

providing an iterative function to evaluate the customer and each of the accounts, the iterative function having virtual attributes for accessing at least one of the group consisting of customer data and account data;

iterating through the iterative function in accordance with the number of the accounts to thereby evaluate the customer and each of the accounts, wherein the iterative function evaluates each account for the same product or service with the same strategy, and evaluates accounts for different products or services with different strategies; and

taking an action in accordance with a result of the evaluation of the customer.

24. (NOT AMENDED) A process as in claim 23, wherein the iterative function is one of the group consisting of an iterative decision tree, an iterative matrix, an iterative score model, an iterative list processor and an iterative user exit.

25. (NOT AMENDED) A process as in claim 23, wherein the iterative function calls another iterative function.

26. (FOUR TIMES AMENDED) An apparatus for evaluating a customer of an organization having more than one account, comprising:

a computer-implemented evaluation device which loads all customer and account data required for evaluating the customer and each of the accounts, and evaluates the customer



and each of the accounts via an iterative function which uses the loaded customer and account data, wherein the evaluation device evaluates each account for a same product or service via the iterative function with the same strategy and evaluates accounts for different products or services via the iterative function with different strategies, the loaded customer and account data being loaded at a time prior to the evaluation by the evaluation device and being sufficient to evaluate the customer and each of the accounts by the evaluation device without loading additional customer or account data; and

an action taking system which takes an action in accordance with a result of the evaluation by the evaluation device.

27. (THREE TIMES AMENDED) An apparatus as in claim 26, wherein the iterative function has virtual attributes and iterates through in accordance with the number of said accounts .

28. (FOUR TIMES AMENDED) An apparatus for evaluating a customer of an organization having more than one account, comprising:

computer-implemented evaluating means for loading all customer and account data required to evaluate the customer and each of the accounts, and for evaluating the customer and each of the accounts via an iterative function which uses the loaded customer and account data, wherein said means evaluates each account for a same product or service via the iterative function with the same strategy and evaluates accounts for different products or services via the iterative function with different strategies, the loaded customer and account data being loaded at a time prior to said evaluating and being sufficient to evaluate the customer and each of the accounts by said means without loading additional customer or account data; and

means for taking action in accordance with a result of the evaluation by the evaluating means.

29. (THREE TIMES AMENDED) A computer-implemented decision management process for evaluating a customer of an organization having more than one account for a first product or service, and more than one account for a second product or service different from said first product or service, comprising:

loading all customer and account data required for evaluating the customer and each of the accounts;

via an iterative function which uses the loaded customer and account data,  
evaluating the customer and each of the accounts for the first product or  
service with a first strategy, and  
evaluating the customer and each of the accounts for the second product  
or service with a second strategy different from the first strategy, the loaded customer and  
account data being loaded at a time prior to said evaluating and being sufficient to evaluate the  
customer and each of the accounts via the iterative function without loading additional customer  
or account data; and  
taking an action in accordance with said evaluating the customer and each of the  
accounts for the first product or service and said evaluating the customer and each of the  
accounts for the second product or service.

30. (ONCE AMENDED) A process as in claim 29, wherein said evaluating the  
customer and each of the accounts for the first product or service comprises:  
evaluating the customer and each of the accounts for the first product or service  
via an iterative decision tree having virtual attributes and which iterates through in accordance  
with the number of accounts for the first product or service of the customer.

31. (ONCE AMENDED) A process as in claim 30, wherein said evaluating the  
customer and each of the accounts for the second product or service comprises:  
evaluating the customer and each of the accounts for the second product or  
service via an iterative decision tree having virtual attributes and which iterates through in  
accordance with the number of accounts for the second product or service of the customer.

32. (ONCE AMENDED) A process as in claim 29, wherein said evaluating the  
customer and each of the accounts for the first product or service comprises:  
evaluating the customer and each of the accounts for the first product or service  
via an iterative matrix having virtual attributes and which iterates through in accordance with the  
number of accounts for the first product or service of the customer.

33. (ONCE AMENDED) A process as in claim 32, wherein said evaluating the  
customer and each of the accounts for the second product or service comprises:  
evaluating the customer and each of the accounts for the second product or

service via an iterative matrix having virtual attributes and which iterates through in accordance with the number of accounts for the second product or service of the customer.

34. (ONCE AMENDED) A process as in claim 29, wherein said evaluating the customer and each of the accounts for the first product or service comprises:

evaluating the customer and each of the accounts for the first product or service via an iterative function having virtual attributes and which iterates through in accordance with the number of accounts for the first product or service of the customer.

35. (ONCE AMENDED) A process as in claim 34, wherein said evaluating the customer and each of the accounts for the second product or service comprises:

evaluating the customer and each of the accounts for the second product or service via an iterative function having virtual attributes and which iterates through in accordance with the number of accounts for the second product or service of the customer.

36. (ONCE AMENDED) A process as in claim 29, wherein said evaluating the customer and each of the accounts for the first product or service comprises:

evaluating the customer and each of the accounts for the first product or service via first and second iterative functions, each having virtual attributes and iterating through in accordance with the number of accounts for the first product or service of the customer, wherein the first iterative function calls the second iterative function.

37. (ONCE AMENDED) A process as in claim 36, wherein said evaluating the customer and each of the accounts for the second product or service comprises:

evaluating the customer and each of the accounts for the second product or service via first and second iterative functions, each having virtual attributes and iterating through in accordance with the number of accounts for the second product or service of the customer, wherein the first iterative function calls the second iterative function.